

Primary Health Care Initiatives (PHCI) Project  
Contract No. 278-C-00-99-00059-00  
Abt. Associates Inc.

**ABNORMAL UTERINE BLEEDING AND AMENORRHEA**

**LEARNING OBJECTIVES:**

- Terminology of uterine bleeding disorders
- Differential diagnosis of abnormal uterine bleeding
- Evaluation and management of abnormal uterine bleeding

**TEACHING STRATEGIES:**

- Interactive lecture
- Small group discussion
- Discussion of case study

**MATERIALS AND EQUIPMENT NEEDED:**

- White board for summarizing major points
- Overhead projector and transparencies

**LEARNING POINTS:**

- Terminology of uterine bleeding disorders

<b>Term</b>	<b>Definition</b>
Menorrhagia -	Prolonged or excessive bleeding at regular intervals
Metrorrhagia -	Irregular, frequent uterine bleeding of varying amounts but not excessive
Menometrorrhagia -	Prolonged or excessive bleeding at irregular intervals
Polymenorrhea -	Regular bleeding at intervals of less than 21 days
Oligomenorrhea -	Bleeding at intervals greater than every 35 days
Amenorrhea -	No uterine bleeding for at least 6 months
Intermenstrual -	Uterine bleeding between regular cycles

- Evaluation of abnormal bleeding – Key elements of History
  - Age of patient (pre-menopausal, peri-menopausal, post-menopausal)
  - Length of abnormal bleeding – acute or chronic or intermittent

- Is patient ovulating?
  - Ovulating – patient has symptoms such as cyclic mood swings, premenstrual breast tenderness, mild edema, pain with bleeding
  - Not ovulating – long periods of amenorrhea, with very irregular bleeding, and none of the above symptoms
- History of bleeding disorders (frequent nosebleeds or bleeding gums, family history of bleeding problems)
- Sexual and reproductive history
- Use of contraceptives (especially oral contraceptives, injectables or Norplant, and IUD)
- Evaluation of abnormal bleeding – Key elements of physical examination and initial laboratory evaluation
  - Vital signs, especially postural blood pressure changes suggesting hypovolemia
  - Heart and lungs
  - Thyroid abnormalities (goiter, nodules, evidence of hyper or hypothyroidism)
  - Abdomen – especially evaluation of liver and possible hepatic disease (jaundice, evidence of cirrhosis)
  - Evidence of bleeding disorder (bruises, petechiae)
  - Pelvic examination
    - Evaluate cervix for polyps, inflammation, lacerations, masses or abnormal tissue
    - Evaluate uterus for size, regularity (fibroid tumors), tenderness
    - Evaluate adnexae for possible cysts, abscess, inflammation or tenderness
  - Initial laboratory evaluation on all women:
    - Hemoglobin to evaluate anemia and chronic blood loss
    - Pregnancy test in all women except those clearly post-menopausal
    - Pap smear (taken during pelvic examination)
    - Other tests as indicated by history and examination, especially thyroid studies (TSH, T4) and prolactin level
- Differential diagnosis – most common possibilities

**Infection**

Cervicitis  
Pelvic Inflammatory Disease

**Trauma**

Laceration, abrasion  
Foreign body

**Malignant neoplasm**

Cervical  
Endometrial  
Ovarian

**Benign pelvic pathology**

**Systemic disease**

Hepatic disease  
Renal disease  
Coagulation disorder  
Leukemia

**Medications/Other**

Intrauterine device  
Hormones (oral contraceptives, estrogen, progesterone)  
Anovulatory cycles  
Hypothyroidism  
Hyperprolactinemia  
Cushing's disease  
Polycystic ovarian syndrome

Cervical polyp	Adrenal dysfunction/tumor
Endometrial polyp	Stress (emotional, excessive exercise)
Fibroid tumor	

### **Management of abnormal vaginal bleeding in the pre-menopausal woman**

- Identify and treat possible anemia – usually with iron supplements
- If patient appears to be ovulating:
  - Evaluate for possible bleeding disorder, hypothyroidism, cervical polyp or fibroid, cervical or uterine cancer
  - Remove IUD if present, and offer patient another method of contraception
  - If none of the above found, treat for 3 months with combined oral contraceptives, or with NSAID such as naproxyn 250 mg bid.
  - Refer to specialist if no response
- If patient appears to NOT be ovulating:
  - Evaluate for general disease (infection, hepatic, renal), for stress or overwork, or recent weight loss
  - Evaluate TSH and T4 level for thyroid abnormality, and prolactin level (prolactinoma)
  - In women > 35 years, evaluate for cervical disease or fibroid tumor, or cancer of cervix or uterus
  - If none of the above found, can use one of the following treatments:
    - o 3 – 6 months with combined oral contraceptives
    - o Progesterone withdrawal every month (10 mg/day of medroxyprogesterone X 10 days every month)
  - Refer to specialist if no response

### **Management of abnormal vaginal bleeding in the peri-menopausal woman (generally between age 45 – 50):**

- Most commonly due to anovulatory bleeding (dysfunctional uterine bleeding)
- However, risk of bleeding from malignancy (cervical or uterine or ovarian cancer) or from structural problem (fibroid tumor of uterus, or cervical polyp) is higher
- Evaluate for anemia and treat with iron supplementation if necessary
- Exclude pregnancy in all women up to age 50
- Refer patient for endometrial biopsy and Pap smear before beginning trial of hormonal methods

### **Evaluation and management of amenorrhea**

Primary Amenorrhea – no menstrual periods at all since adolescence

- Usually concerning if no menses by age 15, definitely abnormal if no menses by age 16
- Multiple possibilities for primary amenorrhea, including:
  - Imperforate hymen
  - Genetic abnormalities (Turners, Kalliman’s syndrome)
  - Hypothalamic or pituitary abnormalities
  - Adrenal gland abnormalities (adrenal hyperplasia)
  - Absent or malformed uterus or ovaries
- Generally should be referred to specialist for evaluation

Secondary Amenorrhea – normal or irregular menses followed by > 6 months of no vaginal bleeding

- Common causes are often benign, such as:
  - Amenorrhea of lactation (may be prolonged even after breastfeeding stopped)
  - Overly vigorous exercise
  - Significant emotional stress
  - Recent weight loss (dieting, eating disorders)
  - Hormonal contraceptives (combined or progesterone only contraceptives, injectables, Norplant)
- Other possible causes that require investigation and referral to specialist:
  - Premature menopause (prior to age of 45)
  - Pituitary tumor (prolactin secreting adenoma) – often associated with spontaneous galactorrhea – clear or milky nipple discharge

### **CASE STUDY:**

Name of patient	Muna
Sex	Female
Date of Birth	[REDACTED]
Date of visit	5 April 2000

Vital Signs	pulse	82/min
	B/p	120/80
	weight	80 kg
	height	168

Medical History: She is complaining heavy infrequent periods, which has been worse over the past year. She has a period every 40 to 60 days which lasts for 10-14 days.

Upon questioning, she has suffered from irregular periods for the past 20 years, uses barrier contraception.

Mother of three children, she had fertility treatment prior to the first pregnancy.

Physical examination:

Over weight, acne but not hirsute.

Pelvic examination revealed no abnormality

Topics of discussion regarding case study:

- What additional elements in the history should be asked?
- What additional elements in the examination should be done?
- What is the appropriate plan of management?

### **CRITICAL ELEMENTS FOR REFERRAL**

- Presence of structural abnormality such as cervical polyp, cervical or vulvar mass, etc.
- Suspicion of bleeding abnormality
- Suspicion of malignancy such as cervix or endometrium
- Bleeding during pregnancy

